

Background

EOSDIS Test System (ETS) Implementation Schedule

The EOSDIS Test System (ETS) currently consists of two data generation simulators and test tools that can be used to test key EOSDIS data interfaces at the EOC, DAACs, EDOS, and Ground Terminals. These two data generation tools are as follows:

- The Multimode Portable Simulator (MPS) -- low fidelity spacecraft communications simulator to support testing of forward-link and non-science return-link processing. The MPS operates in a serial spacecraft data mode and in an IP network mode, which simulates the spacecraft data across the EDOS-control center interface.**
- The Simulated Consultative Committee for Space Data Systems (CCSDS) Telemetry Generator (SCTGEN) -- SCTGEN has been developed as part of the Earth Observing System Data and Information System (EOSDIS) Test System (ETS) Project. It is used to create data files that simulate CCSDS telemetry data streams and EOS Data and Operations System (EDOS) generated data products. A data transmission system is needed to actually transmit the SCTGEN-generated data files.**

Two other ETS simulators were also developed for EOS Mission Systems, but they are no longer being supported. These systems are as follows:

- The High-Rate System (HRS) -- EOSDIS return-link science data processing and interface test tool.**
- The Low-Rate System (LRS) -- Functional EDOS interface between the EOC and either the Spacecraft Integration and Test Facility (SCITF) or Spacecraft Simulator (SSIM).**

EOSDIS Test System (ETS) Implementation Schedule

Multimode Portable Simulator (MPS):

- R1.0: Initial Delivery: 2 December 1996
- R1.1.0: 4 April 1997
- R1.2.0: 6 June 1997
- R1.2.1: Engineering Patch 30 July 1997
- R1.3.0: 19 September 1997
- R1.4.0: 19 December 1997
- R1.5.0: 3 April 1998
- PM-1 SRR: 17 September 1998*
- R1.6.0: 15 January 1999
 - Note: All MPS Releases 1 through 6 was for support of AM-1 (Terra)
- MPS PC Prototype Demonstration: 24 February 1999*
- MPS PM-1 Design Review: 24 February 1999*
- MPS PM-1 R1.0 @ Denver Raytheon :30 July 1999*
- MPS PM-1 R1.0 @ GSFC : 1 September 1999*
 - R1.1.0: Installation/Training - Denver: 7/30 - 8/3/99*
 - Installation/Training - GSFC B32: 8/31 - 9/8/99*
- MPS PM-1 R2.0: 24 September 1999*
- MPS PM-1 R3.0:17 December 1999*
- MPS PM-1 R4.0: 31 March 1999*
- MPS PM-1 R5.0 and R6.0: TBD (If Required)*
 - * Supports PM-1 Simulation Requirements

Simulated CCSDS Telemetry Generator (SCTGEN)

- AM-1 Terra/PM-1):

- R1.0: 3 March 1997
- R1.1.0: 27 May 1997
- R1.2.0: 25 August 1997
- R1.3.0: 27 February 1998
- R1.4.0: 26 June 1998
- PM-1 SRR: 17 September 1998*
- R1.5.0 -AM-1(Terra)/PM-1): 10 September1999*
 - * Supports PM-1 Simulation Requirements

Low Rate System (LRS) - AM-1 (Terra): **

- Baseline Release: 18 February 1997
- Final Closeout: 20 June 1997

High Rate System (HRS) - AM-1 (Terra): **

- R1.0: 13 June 1997
- R1.1.0: 30 January 1998
- Closeout Activity: 27 February - 5 March 1998
 - **See Background Information